



## V4 83170 Dual-current 831708 Part number 83170805



- Nominal ratings 0.1 A to 10 A / 250 VAC
- Minimum rating 1 mA / 4 VDC
- Operating temperature up to +125 °C
- Conforming to standards EN 61058 and UL 1054
- Choice of actuators with 2 possible fixing positions

### Part numbers

Type	Function	Connections
83170805 Dual-current 831708	I (changeover)	W7A5

### Specifications

#### Electrical characteristics

Rating nominal / 250 VAC (A)	0,1
Rating thermal / 250 VAC (A)	6

#### Mechanical characteristics

Maximum operating force (N)	1,5
Min. Release force (N)	0,3
Maximum total travel force (N)	1,8
Max. permitted overtravel force (N)	10
Maximum rest position (mm)	9,2
Operating position (mm)	8,4 $\pm$ 0,3
Max. differential travel mm	0,15
Min. overtravel (mm)	0,5
Ambient operating temperature (°C)	-20 $\rightarrow$ +125
Mechanical life (operations)	10 <sup>6</sup>
Contact gap (mm)	0,4
Weight (g)	1,7

### Additional specifications

#### Components

##### Material

- Case : polyester UL 94 VO
- Button : Glass-filled polyamide
- Contacts : AgNi, gold-plated AgNi (dual-current)
- Terminals : cupro-nickel (except W7A5 in brass)

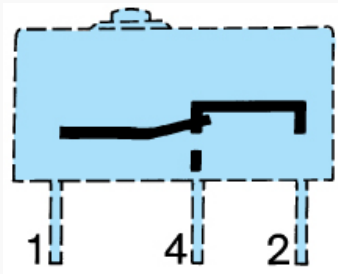
##### Levers

- Flat : stainless steel
- Roller : stainless steel, polyamide roller

##### Approvals

NF - UL - cUL

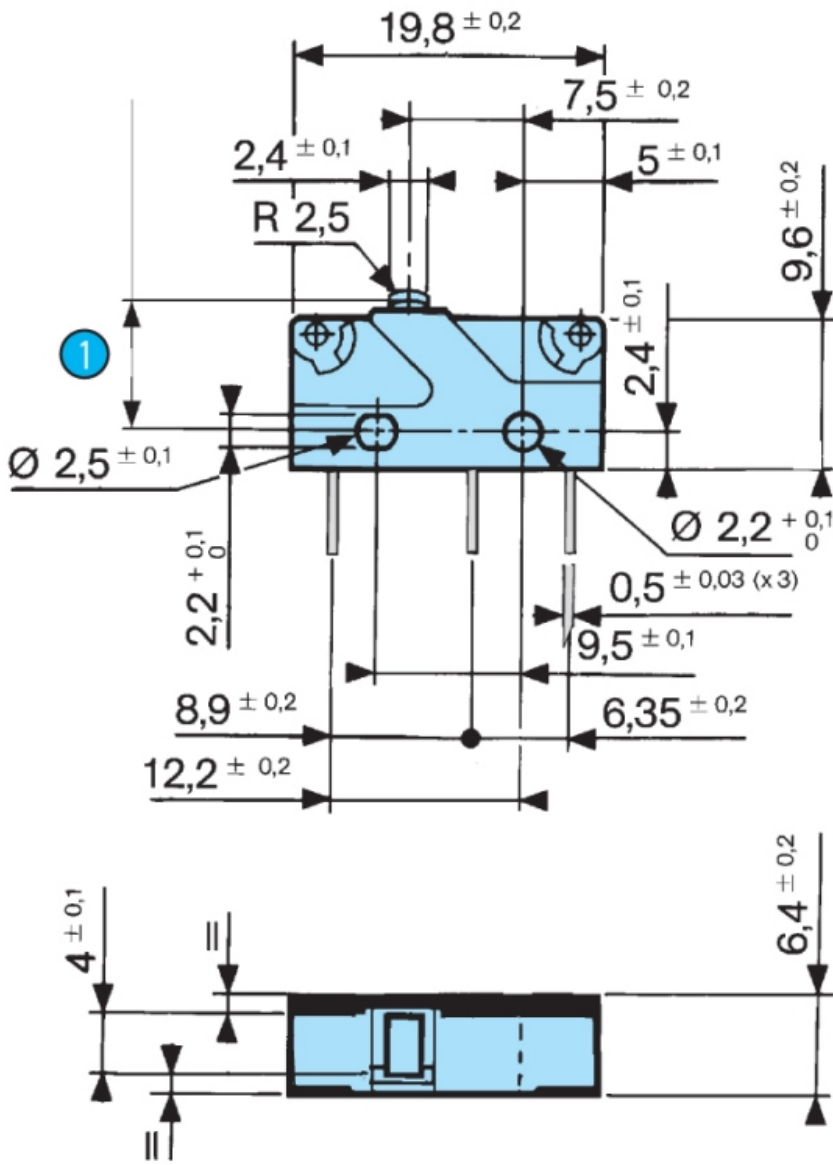
### Principles



### Dimensions (mm)

#### Product

83170  
Asymmetrical version

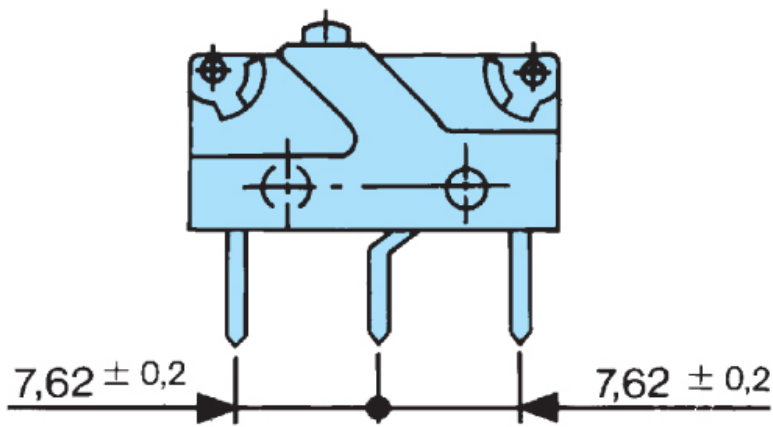


N°	Legend
1	OL = 7.6

Dimensions (mm)

Product

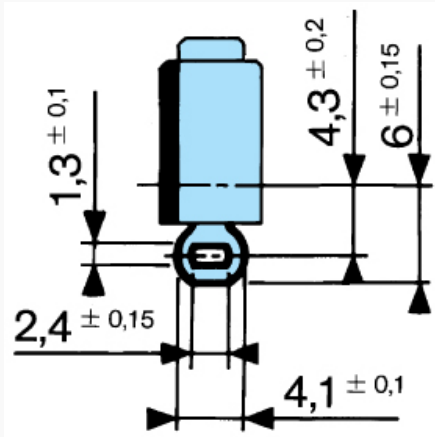
83170 Symmetrical version



## Dimensions (mm)

## Connections

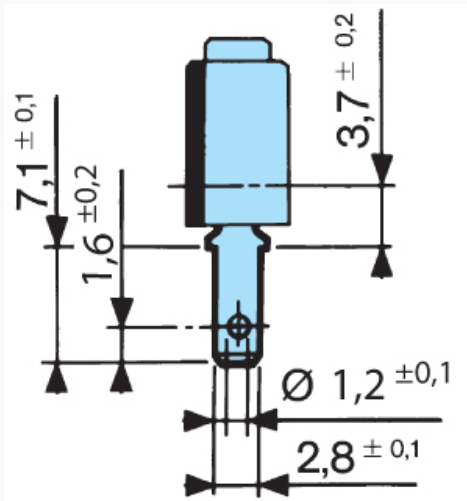
W2



## Dimensions (mm)

## Connections

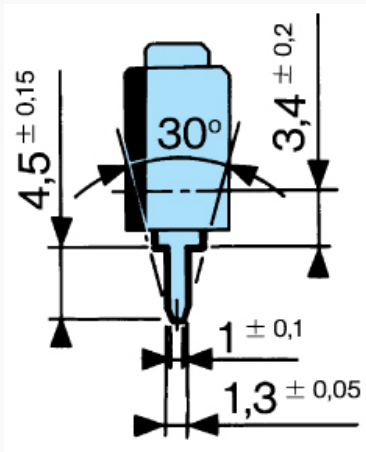
W7A5



## Dimensions (mm)

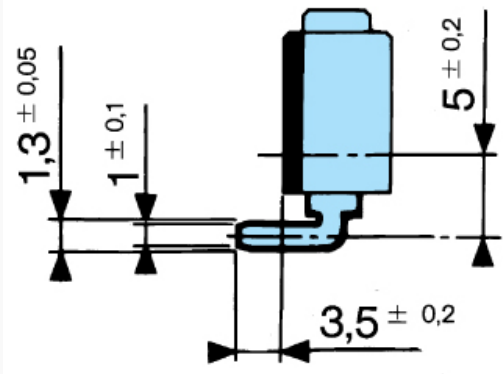
## Connections

X1 - X1S



## Dimensions (mm)

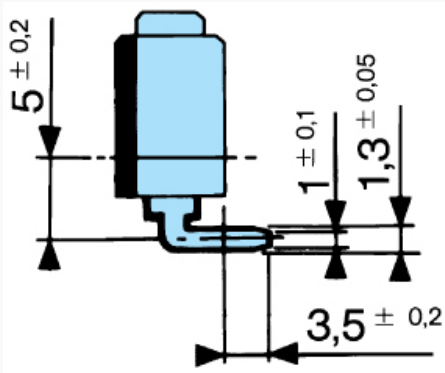
## Connections



Dimensions (mm)

Connections

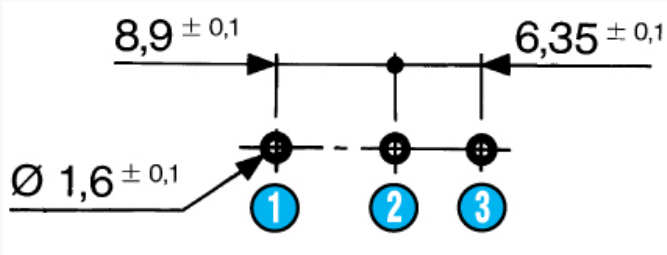
X3 - X3S



Dimensions (mm)

Drilling

Printed circuit board mounting  
Asymmetrical X1 - X2 - X3

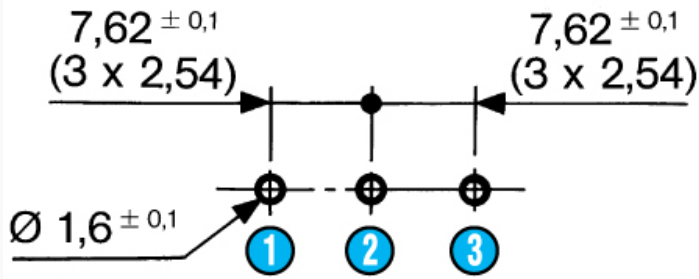


N°	Legend
1	1.C
2	4.NO
3	2.NC

Dimensions (mm)

Drilling

Printed circuit board mounting  
Symmetrical X1S - X2S - X3S

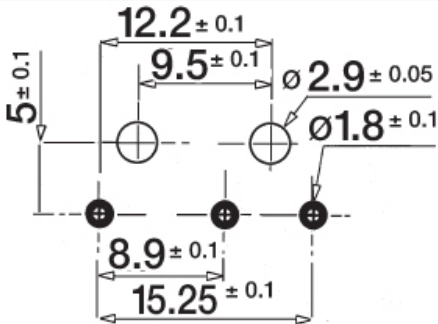


N°	Legend
1	1.C
2	4.NO
3	2.NC

Dimensions (mm)

Drilling

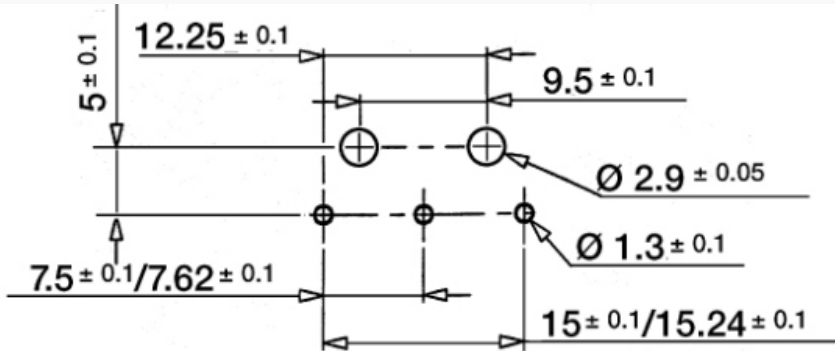
Mounting on a printed circuit board with fixing pins  
Asymmetrical



Dimensions (mm)

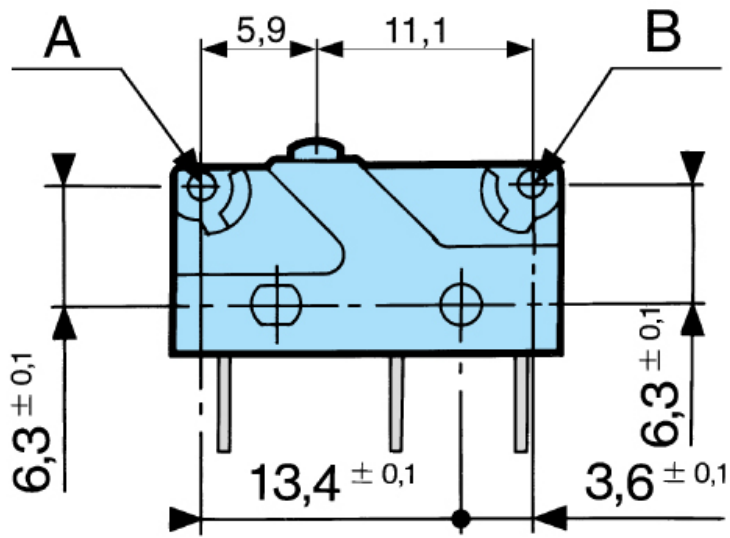
Drilling

Mounting on a printed circuit board with fixing pins  
Symmetrical



Dimensions (mm)

Actuator mounting positions

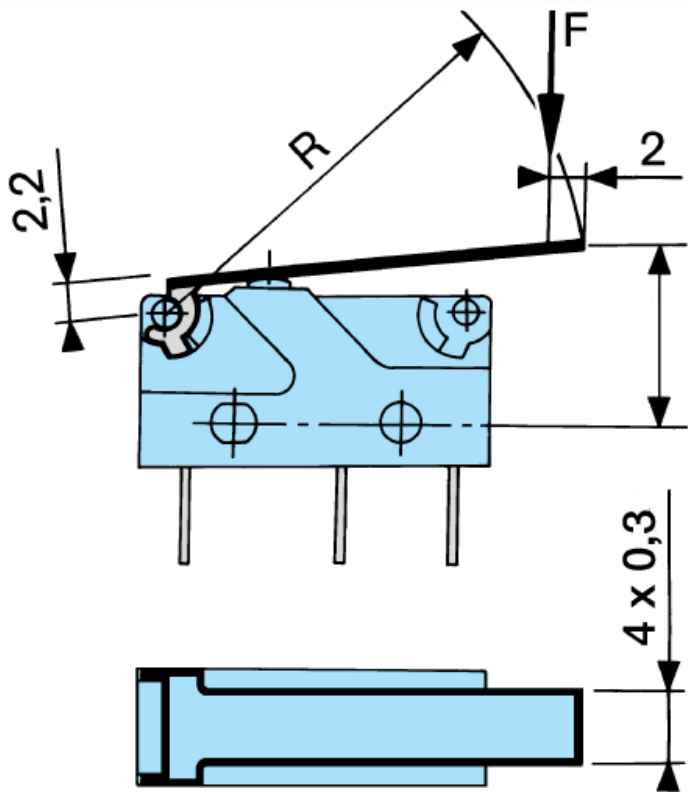


Fixing position Except where otherwise indicated, levers are supplied unmounted. For factory mounting, specify fixing position A or B. To calculate force : divide the switch force by the coefficient in the table. To calculate travel : multiply the switch travel by the same coefficient.

Dimensions (mm)

Actuators

170A

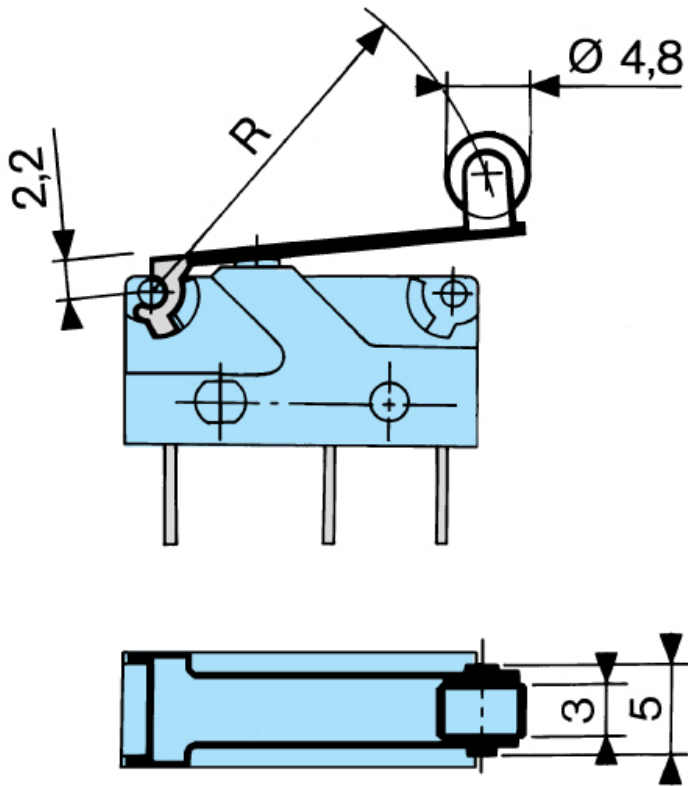


Fixing position Except where otherwise indicated, levers are supplied unmounted. For factory mounting, specify fixing position A or B. To calculate force : divide the switch force by the coefficient in the table. To calculate travel : multiply the switch travel by the same coefficient.

Dimensions (mm)

Actuators

170E

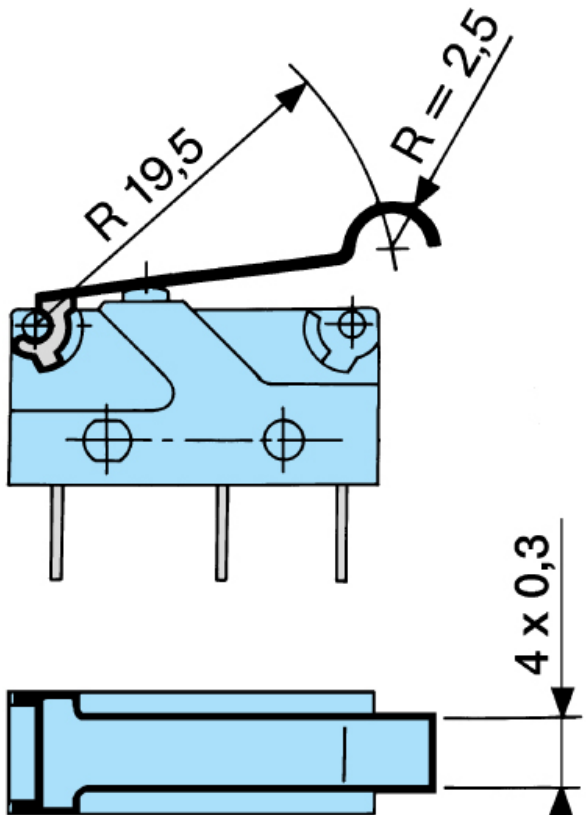


Fixing position Except where otherwise indicated, levers are supplied unmounted. For factory mounting, specify fixing position A or B. To calculate force : divide the switch force by the coefficient in the table. To calculate travel : multiply the switch travel by the same coefficient.

Dimensions (mm)

Actuators

170F

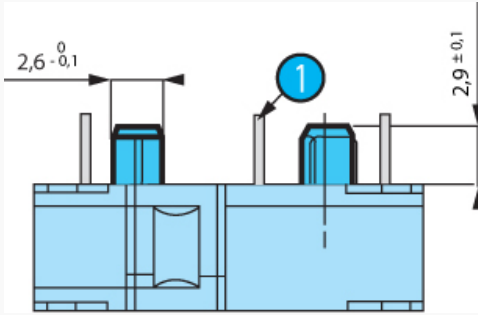


Fixing position Except where otherwise indicated, levers are supplied unmounted. For factory mounting, specify fixing position A or B. To calculate force : divide the switch force by the coefficient in the table. To calculate travel : multiply the switch travel by the same coefficient.

### Dimensions (mm)

#### Actuators

##### Fixing pins



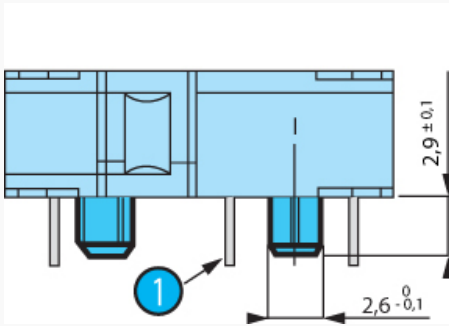
Fixing position Except where otherwise indicated, levers are supplied unmounted. For factory mounting, specify fixing position A or B. To calculate force : divide the switch force by the coefficient in the table. To calculate travel : multiply the switch travel by the same coefficient.

N°	Legend
①	Output on unit side : X2

### Dimensions (mm)

#### Actuators

##### Fixing pins



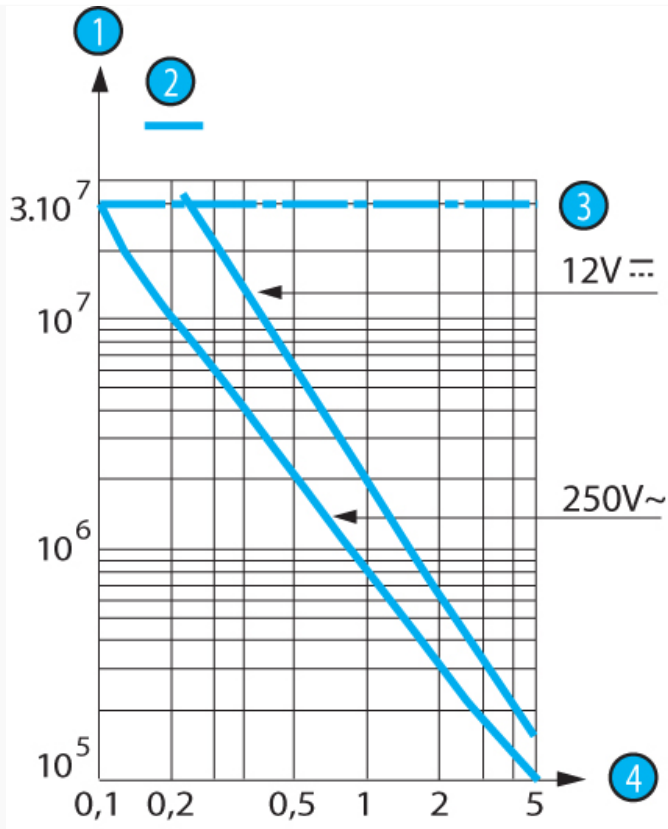
Fixing position Except where otherwise indicated, levers are supplied unmounted. For factory mounting, specify fixing position A or B. To calculate force : divide the switch force by the coefficient in the table. To calculate travel : multiply the switch travel by the same coefficient.

N°	Legend
①	Output on cover side : X3

### Curves

#### Operating curve for types 831708 / 831709





Models 831708 and 831709 are designed to operate equally well on dual-current (1 mA 4 V minimum) or medium-current (5 A maximum) circuits. However, a given product should only be used to switch one type of circuit during its working life.

N°	Legend
1	Number of cycles
2	Resistive circuit
3	Mechanical life limit
4	Current in Amps

**Connections**

**Actuators and fixing positions**

Part numbers for standard actuators	79253327	79253326	79253328	79218454	79253329					
Actuators	Flat 170A R18.3	Flat 170A R24	Flat 170A R41	Roller 170E R20	Dummy roller 170F					
Fixing positions										
Coefficient	A B	A B	A B	A B	A B					
Tripping point	3 1.5	4 2	7 3.5	3 1.5	3 1.5					
	10 <sup>±1.4</sup>	9.2 <sup>±0.9</sup>	10.7 <sup>±1.7</sup>	9.6 <sup>±1</sup>	12.7 <sup>±1.5</sup>	10.6 <sup>±1.8</sup>	15.5 <sup>±1.4</sup>	14.5 <sup>±0.9</sup>	12.9 <sup>±1.3</sup>	11.9 <sup>±1.1</sup>
Levers	Screw 170D		Transverse roller 170EL							
	Characteristics available on request									

**Other information**

**Mounting - Operation**

See basic technical concepts

**Product adaptations**



- Special levers
- Special connections



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- Поставка сложных, дефицитных, либо снятых с производства позиций;
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- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

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